XYLEX* FXY330DF Resin

Polycarbonate + Polyester
SABIC Innovative Plastics

Product Description
Polyester+PC alloy. Diffusion Effect. Color package may affect performance.

General	
Processing Method	• Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.17	g/cm³	ASTM D792 ISO 1183
Melt Mass-Flow Rate (MFR) (265°C/2.16 kg)	15	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (265°C/2.16 kg)	13.0	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Flow: 3.20 mm	0.50 to 0.70	%	
Across Flow: 3.20 mm	0.40 to 0.60	%	
Water Absorption			ISO 62
Saturation, 23°C	0.70	%	
Equilibrium, 23°C, 50% RH	0.27	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- [2]	1440	MPa	ASTM D638
--	1580	MPa	ISO 527-2/1
Tensile Strength			
Yield [3]	47.0	MPa	ASTM D638
Yield	49.0	MPa	ISO 527-2/50
Break [3]	49.0	MPa	ASTM D638
Break	50.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield [3]	5.0	%	ASTM D638
Yield	> 5.0	%	ISO 527-2/50
Break [3]	170	%	ASTM D638
Break	> 200	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span [4]	1500	MPa	ASTM D790
-- [5]	1600	MPa	ISO 178
Flexural Strength			
-- [5, 6]	77.0	MPa	ISO 178
Yield, 50.0 mm Span [4]	67.0	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength [7] (23°C)	7.0	kJ/m²	ISO 179/1eA
Notched Izod Impact			
-30°C	55	J/m	ASTM D256
0°C	64	J/m	ASTM D256
23°C	70	J/m	ASTM D256
-30°C [8]	4.0	kJ/m²	ISO 180/1A
23°C [8]	7.0	kJ/m²	ISO 180/1A
Instrumented Dart Impact			ASTM D3763
23°C, Total Energy	60.0	J	

XYLEX* FXY330DF Resin
Polycarbonate + Polyester
SABIC Innovative Plastics

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, Unannealed, 3.20 mm	72.0	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span [9]	78.0	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	90.0	°C	ASTM D1525 [10]
--	92.0	°C	ISO 306/B50
--	93.0	°C	ISO 306/B120
CLTE			
Flow: -40 to 40°C	0.000089	cm/cm/°C	ASTM E831
Flow: -40 to 40°C	0.000090	cm/cm/°C	ISO 11359-2
Transverse: -40 to 40°C	0.000094	cm/cm/°C	ASTM E831
Transverse: -40 to 40°C	0.000090	cm/cm/°C	ISO 11359-2

Injection	Nominal Value	Unit
Drying Temperature	65.6 to 76.7	°C
Drying Time	3.0 to 5.0	hr
Drying Time, Maximum	8.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 80	%
Rear Temperature	238 to 249	°C
Middle Temperature	238 to 260	°C
Front Temperature	243 to 266	°C
Nozzle Temperature	243 to 266	°C
Processing (Melt) Temp	243 to 266	°C
Mold Temperature	43.3 to 60.0	°C
Back Pressure	0.172 to 0.517	MPa
Screw Speed	20 to 100	rpm
Vent Depth	0.013 to 0.020	mm